

The Ohio State University Bulletin is published at least twenty times during the year as follows: Monthly in June, July, August, and September, and bi-weekly in October, November, December, January, February, March, April, and May.

THE OHIO STATE UNIVERSITY

The Ohio State University, located in Columbus two miles north of the Union Station, is a part of the public educational facilities maintained by the State. It comprises seven colleges and a graduate school:

- The College of Agriculture,
- The College of Arts, Philosophy and Science,
- The College of Education,
- The College of Engineering,
- The College of Law,
- The College of Pharmacy,
- The College of Veterinary Medicine,
- The Graduate School.

This bulletin is devoted exclusively to the work of the College of Pharmacy, and relates to the academic year beginning September, 1912.

[NOTE: The University publishes a bulletin descriptive of each college. Copies may be obtained by addressing W. E. Mann, University Editor, Columbus, Ohio, and stating the college in which the writer is interested.]

UNIVERSITY CALENDAR

1912

Entrance examinations (8 A. M.), Tuesday to Saturday, June 4 to 8.
Summer Session, June 17 to August 9.
Entrance examinations (8 A. M.), Tuesday to Saturday, September 10 to 14.
First semester begins—Registration Day—Tuesday, September 17.
President's Annual Address, Friday, September 20, 11 A. M.
Latest date of admission to candidacy for a degree at the Commencement of June, 1913, Tuesday, October 1.
Date for mid-semester reports to the Deans concerning delinquent students, Saturday, November 23.
Thanksgiving recess, begins November 27, 6 P. M., and ends December 2, 8 A. M.
Christmas recess begins Friday, December 20, 6 P. M.

1913

Christmas recess ends Thursday, January 2, 8 A. M.
Final examinations, first semester, January 31 to February 6.
First semester ends Thursday, February 6, 6 P. M.
Second semester begins—Registration Day—Tuesday, February 11.
Washington's Birthday, Saturday, February 22.
Easter recess, Thursday, March 20, 6 P. M. until Tuesday, March 25, 8 A. M.
Date for mid-semester reports to the Deans concerning delinquent students, Saturday, March 29.
Competitive Drill—Cadet Regiment—Saturday, May 24.
Memorial Day, Friday, May 30.
Final examinations, Thursday, May 29 to Thursday, June 5—(Except Friday, May 30).
Entrance examinations (8 A. M.) Tuesday to Saturday, June 3 to 7.
Commencement, Wednesday, June 11.

COLLEGE OF PHARMACY

The College of Pharmacy was first established as a department of the University immediately after the passage of the State Law requiring the examination and registering of all persons desiring to engage in the practice of Pharmacy. Later when the growth of the University made it desirable to form separate colleges, the College of Pharmacy was established. The College is, therefore, an integral part of the University organization, in fact as well as name, and as a consequence has shared in the generous support afforded the University by the State and National Governments. As a result of this support the College of Pharmacy is in a position, not only to offer every facility for a thorough training in all that pertains to the study of Pharmacy but to maintain a high degree of excellence in its work.

The College has recognized from the first the necessity of a technical training for the Pharmacist and has realized at the same time the importance of developing the practical side of the subject. With this idea in mind the endeavor has been to supply both forms of training, and to this end the laboratory method of instruction has been followed whenever possible. That this method of instruction has been successful is evidenced by the various fields of employment which our graduates have entered.

To supply this training, numerous laboratories have been provided. These are modern in type of construction and are generously equipped with the apparatus necessary for demonstrating and carrying on the work.

The work of the College, aside from that of pure pharmacy, is co-ordinated with that of the other departments of the University. As a result the students share, not only the advantages of the broadening influences of the contact with the students of the other departments

but also the spirit of a great educational institution, factors of the greatest importance to the student selecting a college for a technical education.

FACILITIES

The College of Pharmacy is located in the west end of Chemical Hall, one of the largest and best equipped buildings on the campus. The quarters occupied by the College consist of the following rooms and laboratories located for the most part on the first floor: A large laboratory devoted to general pharmacy and fully equipped with hoods, hot plates, drying ovens and closets, percolating racks, balances and other apparatus for conducting the work.

Advanced Laboratory—This is devoted to special pharmaceutical assaying and the study of advanced problems. It is well equipped with the general and special apparatus necessary for carrying on such work.

Pharmacognosy Laboratory—This room is especially arranged for working in small sections, thus insuring individual attention to the students. The equipment is quite complete, consisting in part of compound microscopes, microtomes and other apparatus, as well as an abundance of material for study purposes.

Dispensing Room—This laboratory is well arranged and equipped for demonstrating and supplying practical work in this line of pharmacal instruction.

Mill and Machine Room—This is a large and well lighted room in the basement. It is provided with mills for grinding and with machines for tablet making and the coating of pills and tablets.

In addition to the laboratories and general equipment mentioned, the College has a most ample collection of crude drugs with examples, in many instances, to show methods of packing and shipping. Also sets of chemical specimens, many of which illustrate the the various stages of manufacture. Further may be mentioned complete sets of pharmaceutical products, volatile oils, alkaloids and rare, curious and costly drugs, all of which are open to the students for purpose of study and identification.

Library—Another important feature of the equipment of the College is the extensive library located in the building. This is in common with the library of the Department of Chemistry and contains not only a large number of text and reference books covering every

branch of Chemistry and Pharmacy and their allied fields, but also complete sets of all the important American, English, French and German journals devoted to these subjects.

The remainder of the building is occupied by the various divisions of Chemistry and the Chemical Store Room. These rooms and laboratories are shared with the students from the other departments of the University. The advantage in having the use of the splendid equipment of the Department of Chemistry means much to the students of the College of Pharmacy.

The Chemical Store Room occupies a large dispensing room in the center of the building, from which all apparatus and supplies are dispensed. It is connected by a corridor with a fire-proof storage room in the rear.

Instruction in those subjects included in the courses, other than those pertaining directly to Chemistry and Pharmacy, is given in various other buildings of the University. This means that the students have the advantage of the large and varied equipment, as well as instruction, in the departments of Botany, Physics, Physiology, Geology, Agricultural Chemistry, Bacteriology and others, a feature that should not be overlooked by prospective students.

OPPORTUNITIES IN PHARMACY

There is always a demand for well trained men in Pharmacy and its many allied fields, and it may be safely said that the opportunities were never greater than at the present time. The College is constantly receiving inquiries for technically trained men, not only in all lines of pharmaceutical work, but in other allied fields where capable and well qualified men are needed. The following are some of the fields open to capable pharmacists: As proprietors, managers and prescription clerks in pharmacies; as chemists and department managers in laboratories of manufacturers and jobbers of drugs and chemicals; as manufacturers and dispensers of medicinal and pharmaceutical products in private, municipal and state hospitals; as pharmacists in the Army and Navy; as pharmaceutical and research chemists in manufacturing houses; as food and drug experts in Government Laboratories; as chemists and bacteriologists in Municipal and State Public Health laboratories and Experiment Station work; as teachers in schools and colleges of pharmacy; as chemists for importers and jobbers of drugs, groceries and other food products.

FACULTY AND OTHER INSTRUCTORS

WILLIAM OXLEY THOMPSON, D. D., LL. D., PRESIDENT
of the University.

✓ GEORGE BEECHER KAUFFMAN, B. Sc., Pharm. D., DEAN,
Professor of Pharmacy.

✓ CLAIR ALBERT DYE, G. PH., PH. D., SECRETARY,
Professor of Pharmacy.

SIDNEY AUGUSTUS NORTON, PH. D., LL. D., Emeritus
Professor of Chemistry.

ALBERT MARTIN BLEILE, M. D., Professor of Anatomy
and Physiology.

JOSEPH VILLIERS DENNEY, M. A., Professor of English.

WILLIAM MCPHERSON, D. Sc., PH. D., Professor of
Chemistry.

CHARLES SMITH PROSSER, D. Sc., PH. D., Professor of
Geology.

JOHN ADAMS BOWNOCKER, D. Sc., Professor of Inorganic
Geology.

✓ CHARLES BRADFIELD MORREY, B. A., M. D., Professor of
Bacteriology.

GEORGE WASHINGTON MCCOARD, M. A., Professor of
Mathematics.

WILLIAM EDWARDS HENDERSON, PH. D., Professor of
Inorganic and Physical Chemistry.

CHARLES WILLIAM FOULK, B. A., Professor of Analytical
Chemistry.

JOHN HENRY SCHAFFNER, M. A., M. Sc., Professor of
Botany.

EDWARD EVERETT SOMERMEIER, G. PH., Professor of
Metallurgy.

WILLIAM LUCIUS GRAVES, M. A., Associate Professor of
English.

BERTHOLD A. EISENLOHR, M. A., Associate Professor of
German.

SAMUEL EUGENE RASOR, M. A., Associate Professor of Mathematics.

EUGENE FRANKLIN MCCAMPBELL, PH. D., Professor of Bacteriology.

CHARLES LINCOLN ARNOLD, M. SC., Associate Professor of Mathematics.

JAMES RENWICK WITHROW, PH. D., Associate Professor of Chemistry.

WILLIAM LLOYD EVANS, PH. D., Professor of Chemistry.
RAYMOND J. SEYMOUR, B. SC., M. D., Associate Professor of Anatomy and Physiology.

FREDERIC COLUMBUS BLAKE, PH. D., Assistant Professor of Physics.

ALFRED PAUL DACHNOWSKI, PH. D., Assistant Professor of Botany.

EDWIN POE DURRANT, M. A., Assistant Professor of Anatomy and Physiology.

ROBERT MEIKLEJOHN, M. E., Assistant Professor of Engineering Drawing.

MAY THOMAS, PH. D., Assistant Professor of German.

FREDERICA DETMERS, M. SC., Instructor in Botany.

— EDWARD SPEASE, B. SC., (Phar.), Instructor in Pharmacy.

ROBERT OSCAR BUSEY, M. A., Instructor in German.

HERMAN GUSTAVUS HEIL, PH. B., Instructor in Physics.

ADOLPH FEIEL, Assistant in Anatomy and Physiology.

— LEON POWELL SHINN, Student Assistant in Pharmacy.

OLIVE JONES, B. A., Librarian.

GEORGE L. CONVERSE, Captain U. S. A. (Ret.), Professor of Military Science and Tactics.

H. SHINDLE WINGERT, M. D., Professor of Physical Education.

ADMISSION

The admission of students is in charge of the University Entrance Board which determines the credits that shall be issued on all entrance examinations and certificates and furnishes to applicants all desired information. Correspondence relating to admission should be addressed to the Entrance Board, Ohio State University, Columbus.

Applicants for admission must be at least sixteen years of age. The College is open on equal terms to both sexes.

Requirements of The Ohio Board of Pharmacy

On October 13, 1904, the Ohio Board of Pharmacy fixed the minimum requirement for admission to Schools and Colleges of Pharmacy by resolution, as follows:

Resolved, That on and after July 1st, 1905, no school or college of pharmacy shall be recognized as in good standing by the Ohio Board of Pharmacy which does not require of all applicants as a minimum condition of admission a common school education, or the equivalent thereof, which shall include one year in a High School of the first grade (Ohio), or an academy, legally constituted, providing a course of study of not less than four years.

Later, in explanation of the above resolution, the following statement was issued: In order to dispel any doubt as to the meaning of the term "equivalent to one year in a High School of first grade (Ohio)," used in the resolutions of October 13, 1904, the Board hereby specifies a minimum equivalent as embracing one year of instruction in each of the following branches: Algebra, English, Natural Science, and History (United States or General).

Any school of pharmacy may admit to a course in pharmacy an applicant who has received instruction in the branches herein named in a high school, academy, or other educational institution, for a period of one year.

By order of the Board of Pharmacy.

W. R. OGIER, *Secretary*.

COLUMBUS, OHIO, April 1st, 1905.

Admission to the Course Leading to a Certificate*

In order to conform to the requirements of the Board, applicants for admission to the Short Course must present certificates showing instruction in the following:

English, one year.

Algebra, one year.

History (United States or General), one year.

Natural Science, one year.

The requirements in Natural Science may be met by credits in any of the following subjects, or by combination of them: Physical Geography, Physics, Physiology, Chemistry, Botany.

Applicants who are slightly deficient in these requirements will be given until the end of the first year to remove their deficiency.

Candidates for entrance should secure from their school authorities certificates describing in full the work completed. These certificates should be sent in advance, if possible, to the Entrance Board. Candidates presenting themselves without certificates must come in time for the scheduled examinations.

Special Short Course Students

Students who have completed the work for the first year of the Short Course, and who wish to pursue certain of the studies of the Long Course, will be permitted to do so provided they are able to convince the Executive Committee and the Entrance Board of their ability to carry the work desired. Such students are classified as special students in the Short Course.

Admission to the Course Leading to a Degree

There are two modes of admission to the course leading to a degree: (a) by examination, (b) by certificate.

Admission by Examination

The Entrance Board will conduct entrance examinations June 4 to 8, and September 10 to 14, 1912. Part of the examinations may be taken in June and the remainder in September. All applicants for admission who do not possess certificates covering entrance requirements must take examinations for admission.

*For outline of the Short Course see page 16.

SCHEDULE—Examinations will be from 8 to 12 A. M., and from 1 to 5 P. M.

Students intending to take any of the examinations scheduled in any given half day must appear within one hour of the time set for the examination. Students applying for examination will first go to the office of the Registrar, University Hall, for registration.

Tuesday	A. M.	History: Ancient and Medieval (to 814), Medieval and Modern (after 814), English
"	P. M.	English Composition and Rhetoric, English Classics, Chemistry.
Wednesday	A. M.	Algebra, Physical Geography.
"	P. M.	Plane Geometry, German, Spanish.
Thursday	A. M.	Civil Government, Solid Geometry, Zoology.
"	P. M.	Beginning Latin and Caesar, Elements of Agri- culture, Trigonometry, Commercial Geography.
Friday	A. M.	Physics, Physiology, Botany.
"	P. M.	American History, French, English Literature.
Saturday	A. M.	Vergil, Cicero, Domestic Science.

A special bulletin of entrance information will be mailed on request. Address The University Editor.

Admission by Certificate

Applicants may be admitted without examination on presentation of properly indorsed certificates from the State Board of School Examiners, from approved normal schools or academies, from the first and second grade high schools of the State or from schools outside of the State, meeting the requirements, under the following provisions:

(a) If from secondary schools, the certificate must show that the applicant is a graduate in good standing of the school issuing it, and also must state in detail the studies pursued, the text-books used, the amount of time devoted to each subject, and the fact that the applicant has passed in the work.

(b) Any entrance requirement not covered by a certificate must be met by examination.

Blank certificates may be obtained by addressing the Secretary of the Entrance Board. Certificates should be filled out and returned to the University by the proper school official as early as possible after the close of schools in June.

Requirements by Units

A unit is the equivalent of a course of study continuing through a school year and covering, in the aggregate, not less than one hundred and twenty clock hours of class-room work, two hours of manual training or other laboratory work being equivalent to one hour of class-room work. To obtain full standing, applicants under twenty-one years of age must have credit by examination or certificate for twelve units, of which two shall be English, one history, two mathematics, one science, and two foreign language, selected from the following list:

English.....	4 units
(Foreign students may substitute their native language for the English requirement.)	
American History or American History and Civil Government.....	1 unit
Ancient History (Greek and Roman) and Medieval History to 814 A. D..	1 unit
Medieval and Modern History (from 814 A. D. to the present).....	1 unit
(For the present, General History may be counted as a unit, but not in addition to Ancient or Medieval or Modern History.)	
English History.....	1 unit
Algebra (through quadratics).....	1 unit
Algebra (beyond quadratics).....	$\frac{1}{2}$ unit
Geometry (plane).....	1 unit
Geometry (solid).....	$\frac{1}{2}$ unit
Trigonometry.....	$\frac{1}{2}$ unit
Latin.....	2, 3, or 4 units
Greek.....	2, 3, or 4 units
German.....	2, 3, or 4 units
French.....	2, 3, or 4 units
Spanish.....	2, 3, or 4 units
(Not less than two units of any language will be accepted.)	
Physics.....	1 unit
Chemistry.....	1 unit
Physical Geography.....	1 unit
Zoology.....	1 unit
Botany.....	1 unit

Physical Geography	}	For the present any two of these may be counted together as 1 unit
Zoology		
Botany		
Physiology		
Agriculture	}	The Entrance Board may, after investigating each claim, grant a total credit of not to exceed 2 units
Free-hand Drawing		
Manual Training		
Domestic Science		

Preparation in excess of the requirements in any subject will not be credited unless it amounts to one-half unit.

Students under twenty-one years of age unable to meet the full entrance requirements may be admitted with conditions in not more than two units, which shall not be in the same group, except in Foreign Language. All entrance conditions must be removed within two years after admission.

Students over twenty-one years of age may be admitted as special students by joint action of the Entrance Board and the Executive Committee of the College of Pharmacy.

The extent and character of the work required in each subject mentioned above is indicated in a special bulletin entitled "Definitions of Entrance Units," which will be sent to any one requesting it. Address the University Editor. In general, it may be said, the definitions of the North Central Association are accepted as our definitions.

Admission With Advanced Standing

Applicants who have completed at least one year's work in an approved college, and who bring official and explicit certificates describing their courses of study and scholarship, and letters of honorable dismissal, will be admitted in accordance with either of two plans:

(1) The entrance units on which the candidate was admitted to the approved college will be accepted at their face value; deficiencies will be made up from the college credits presented, and advanced credits will be given for any remaining satisfactory work; or

(2) One year's work will be accepted in lieu of entrance units and the candidate will be admitted without examination and without conditions, but without any advanced standing on the year's work.

Applicants who have completed less than one year's work in an approved college must satisfy the entrance requirements in the usual way, and will then be given credit for any satisfactory work for which they can offer certificates.

Removal of Entrance Conditions

The removal of entrance conditions is administered by the Entrance Board. Conditions may be removed (1) by examination before the beginning of the second year (for schedule of examinations see page 12; or (2) by the substitution by the Entrance Board of excess work in other approved subjects; or (3) by the substitution of other equivalent work to be done at the University. It is the duty of the Secretary of the College to assign to each student having entrance conditions outstanding at the end of the Freshman year such college courses for the following year as may be deemed a fair equivalent for the work in which the student has entrance conditions. A student who has completed a collegiate course is not eligible for entrance examination upon the same topic, unless it is a fixed requirement in the college in which he is registered. (Faculty Rule 97).

COURSES

Two courses of study are offered in this college, viz.: The Short Course, extending over a period of two collegiate years; and the Long Course, extending over a period of four collegiate years and leading to a degree. The object of the Short Course is to train students for the general work of the dispensing pharmacist. It fully meets the requirements of the State Board of Pharmacy, and students completing it find no difficulty in securing registration. The Long Course, on the other hand, furnishes more extensive and more thorough training, which enables the graduate to follow successfully any line of chemical or pharmaceutical work.

THE SHORT COURSE

On the satisfactory completion of this course the student is granted a certificate of Pharmaceutical Chemist.

NOTE: The figures in parenthesis following the name of each study indicates the number of the study in its department; the other figure indicates the number of credit hours.

FIRST YEAR

FIRST SEMESTER			SECOND SEMESTER		
Chemistry	(101)	4.	Chemistry	(102)	4.
Latin	(117)	4.	Latin	(118)	4.
Pharmacy	(101)	5.	Pharmacy	(102)	5.
Pharmacy	(109)	3.	Pharmacy	(110)	3.
Pharmacy	(113)	1.	Botany	(112)	4.
Drill		1.	Drill		1.
Gymnasium		1.	Gymnasium		1.

SECOND YEAR

FIRST SEMESTER			SECOND SEMESTER		
Pharmacy	(103)	5.	Pharmacy	(104)	6.
Pharmacy	(105)	3.	Pharmacy	(106)	3.
Chemistry	(127)	5.	Pharmacy	(114)	3.
Chemistry	(121)	4.	Pharmacy	(116)	2.
Physiology	(107)	3.	Bacteriology	(102)	2.
Drill		1.	Drill		1.

THE COURSE LEADING TO A DEGREE

DEGREE—Bachelor of Science in Pharmacy.

NOTE: The figure in parenthesis following the name of each study indicates the number of the study in its department; the other figure indicates the number of credit hours for the subject.

FIRST YEAR

FIRST SEMESTER			SECOND SEMESTER		
Chemistry	(105 or 109)	4.	Chemistry	(106 or 110)	4.
German	(101)	4.	German	(102)	4.
Mathematics	(121)	3.	Mathematics	(122)	3.
English	(101)	2.	English	(104)	2.
Botany	(101)	4.	Botany	(102)	4.
Drill		1.	Drill		1.
Gymnasium		1.	Gymnasium		1.

SECOND YEAR

FIRST SEMESTER			SECOND SEMESTER		
Chemistry	(119)	4.	Chemistry	(120)	4.
Pharmacy	(101)	5.	Pharmacy	(102)	5.
Physics	(105)	4.	Physics	(106)	4.
Chemistry	(113)	2.	Chemistry	(114)	2.
German	(103)	4.	Chemistry	(124)	1.
Drawing	(129)	1.	Drawing	(130)	2.
Drill		1.	Drill		1.

THIRD YEAR

FIRST SEMESTER			SECOND SEMESTER		
Pharmacy	(103)	5.	Pharmacy	(104)	6.
Pharmacy	(105)	3.	Pharmacy	(106)	3.
Physiology	(101)	3.	Physiology	(102)	3.
Chemistry	(151)	2.	Chemistry	(152)	2.
Chemistry	(153)	2.	Chemistry	(154)	2.
Bacteriology	(107)	3.	Bacteriology	(108)	3.

FOURTH YEAR

FIRST SEMESTER			SECOND SEMESTER		
Geology	(165)	3.	Pharmacy	(108)	5.
Pharmacy	(107)	5.	Pharmacy	(112)	3.
Pharmacy	(111)	3.	Pharmacy	(114)	3.
Thesis			Pharmacy	(116)	2.
Elective (3 to 5 hours credit)			Metallurgy	(104)	2.
			Thesis		

DEPARTMENTS OF INSTRUCTION

ANATOMY AND PHYSIOLOGY

(Biological Hall)

PROFESSOR BLEILE, ASSOCIATE PROFESSOR SEYMOUR, ASSISTANT PROFESSOR DURRANT, MR. FEIEL

101-102. **Human Anatomy and Physiology.** Three credit hours. The year. Must be preceded by a course in chemistry. Professor BLEILE, Associate Professor SEYMOUR.

107. **Human Anatomy, Physiology.** Three credit hours. First semester. Assistant Professor DURRANT.

BACTERIOLOGY

(Veterinary Laboratories)

PROFESSORS MORREY, AND MCCAMPBELL, MR. STARIN

102. **Bacteriology.** Two credit hours. Second semester. Mr. STARIN.

107. **General Bacteriology.** Three to five credit hours. First semester. Professor MORREY, Mr. STARIN.

Making of media, cultures, staining methods, physiological properties.

108. **Pathogenic Bacteria.** Three to five credit hours. Second semester. Same time as Course 107. Prerequisite, Course 107. Professors MORREY, and MCCAMPBELL, Mr. STARIN.

BOTANY

(Botanical Hall)

PROFESSOR SCHAFFNER, ASSISTANT PROFESSORS GRIGGS, AND DACHNOWSKI, MISS DETMERS

101-102. **General Botany.** Four credit hours. The year. Text-books: Curtis's Nature and Development of Plants, Schaffner's Laboratory Outlines for General Botany (2d edition.) Professor SCHAFFNER, Miss DETMERS.

112. **Elementary Botany.** Four credit hours. Second semester. Text-books: Bergen and Caldwell's Practical Botany, and Kellerman's Spring Flora (new edition). This course cannot be used for university credit. Miss DETMERS.

CHEMISTRY

(Chemistry Hall)

PROFESSOR MCPHERSON, EMERITUS PROFESSOR NORTON, PROFESSORS
HENDERSON, FOULK, EVANS, ASSOCIATE PROFESSOR WITHROW,
DR. WILKINSON, MR. KELLOGG, AND DEPARTMENT
ASSISTANTS

101. Elementary Chemistry. Four credit hours. First semester. One lecture, one quiz, six hours laboratory work weekly. Professor EVANS, Mr. VAN SICKLE.

A general introductory course on the chemistry of the non-metals. It is distinctly elementary in character and is arranged for students in short courses only. No credit is allowed for it in the regular four-year courses. Students taking this course should follow with Course 102, second semester.

102. Elementary Chemistry And Qualitative Analysis. Four credit hours. Second semester. One lecture, one quiz, six hours laboratory work weekly. Prerequisite, Chemistry 101. Professor EVANS, Mr. WITZEMANN.

A general introductory course on the chemistry of the metals. The laboratory work deals with the elementary principles of qualitative analysis. The course is arranged for students in short courses only. No credit is allowed for it in the regular four-year courses.

105. Elementary Chemistry. Four credit hours. First semester. Professor EVANS, Mr. DAVISON, Mr. STRATTON.

A general course on the chemistry of the non-metals, arranged for students who have not presented chemistry as an entrance requirement. Students taking this course will follow with Course 106, second semester.

106. Elementary Chemistry and Qualitative Analysis. Four credit hours. Second semester. Prerequisite, Chemistry 105. Professor EVANS, Mr. KELLOGG, Mr. STRATTON.

A general course on the chemistry of the metals. The laboratory work accompanying is a general introductory course in qualitative analysis.

109. General Chemistry. Four credit hours. First semester. One lecture, one quiz, six hours laboratory work weekly. Professor EVANS, Associate Professor WITHROW, Mr. KELLOGG, Mr. WITZEMANN.

A general course on the chemistry of the non-metals. It is more advanced than Course 105 and is arranged for students who have had an acceptable course in elementary chemistry in a secondary school. Students taking this course will follow with Course 110, second semester.

110. General Chemistry and Qualitative Analysis. Four credit hours. Second semester. Prerequisite, Chemistry 109. Professor EVANS, Mr. KELLOGG, Mr. STRATTON, Mr. VAN SICKLE.

A general course on the chemistry of the metals. It is more advanced than Course 106. The laboratory work is a general course in qualitative analysis.

113-114. Advanced General Chemistry. Two credit hours. The year. Prerequisite, Chemistry 106 or 110. Professor HENDERSON.

A course on fundamental topics in the field of advanced general chemistry.

117. Qualitative Analysis. Three credit hours. First semester. One lecture and six hours laboratory work weekly. Time to be arranged. Prerequisite, an acceptable course in general chemistry. Dr. WILKINSON.

119-120. Quantitative Analysis. Four credit hours. The year. One lecture, nine hours laboratory work weekly. Laboratory open forenoons and afternoons. Prerequisite, Chemistry 106, 110 or equivalent. Professor FOULK, Dr. WILKINSON.

First semester, elementary principles of gravimetric and volumetric analysis. Second semester, continuation of work of first semester with typical analytical methods, gravimetric and volumetric. This course must be accompanied by Course 124, except by special permission of the instructor in charge. It is also desirable that it be accompanied by Course 113-114.

121. Quantitative Analysis. Four credit hours. First semester. One lecture, nine hours laboratory work weekly. Laboratory open forenoons and afternoons. Prerequisite, Chemistry 102. Professor FOULK, Dr. WILKINSON.

This is a general introductory course in quantitative analysis. It is arranged for students in short courses only.

124. Chemical Problems. One credit hour. Second semester. Professor FOULK.

Extended practice in the solution of problems pertaining to gravimetric and volumetric analysis. This course is arranged to accompany Course 119-120.

127. **Organic Chemistry.** Five credit hours. First semester. Two lectures, quiz, six hours laboratory work weekly. Prerequisite, an acceptable course in general chemistry. Professor MCPHERSON, Miss MACLEAN.

This is a general introductory course in organic chemistry.

151-152. **Organic Chemistry.** Two credit hours. The year. Two lectures weekly. Prerequisite, Chemistry 113-114 and 119-120, except by special permission of the instructor. Professor MCPHERSON.

This is a general course in organic chemistry.

153-154. **Organic Chemistry.** Two or three credit hours. The year. Six or nine hours laboratory work weekly. Laboratory open afternoons. This course must be accompanied or preceded by Chemistry 151-152. Professor MCPHERSON, Mr. BOORD.

A general course in the preparation of typical organic compounds.

DRAWING

DEPARTMENT OF ENGINEERING DRAWING

(Brown Hall)

PROFESSOR FRENCH, MR. TURNBULL

129. **Freehand Drawing.** One credit hour. First semester.

130. **Lettering.** Two credit hours. Second semester.

ENGLISH

PROFESSOR DENNEY, ASSOCIATE PROFESSOR GRAVES

101. **Paragraph Writing: Description and Narration.** Two credit hours. First semester.

104. **Paragraph Writing: Exposition and Argumentation.** Two credit hours. Second semester.

GEOLOGY

(Orton Hall)

PROFESSOR PROSSER, PROFESSOR BOWNOCKER, ASSISTANT PROFESSOR

HILLS, MR. MORSE

165. **General Geology.** Three credit hours. First semester. Lectures, recitations and laboratory. The first half of the semester, or while the weather permits, field trips will alternate with the laboratory

periods. Field trips Friday afternoon or Saturday morning, when the laboratory work will be omitted for that week. Professor PROSSER and Mr. MORSE.

Structural dynamical and historical geology. The lectures are illustrated by maps, specimens and lantern views. The common rock-forming minerals and rocks are studied in the laboratory, while in the field specimens are collected, sections measured, formations identified, and students given an idea of the method of work pursued by a field geologist.

GERMAN

(University Hall)

PROFESSOR EVANS, ASSOCIATE PROFESSOR EISENLOHR, ASSISTANT

PROFESSORS THOMAS, BARROWS AND LEWISOHN, MR. BUSEY

101-102. Elementary German. Four credit hours. The year.

103. Intermediate German. Four credit hours. First semester. Prerequisite, Course 101-102, or two entrance units.

106. Science Reading. Four credit hours. Second semester. Prerequisite Course 103, or three entrance units.

MATHEMATICS

(University Hall)

PROFESSORS BOHANNAN, MCCOARD, SWARTZEL AND ASSOCIATE

PROFESSOR RASOR

121. College Algebra and Trigonometry. Three credit hours. First semester.

122. Plane Trigonometry and Analytical Geometry. Three credit hours. Second semester.

METALLURGY AND MINERALOGY

(School of Mines Building)

PROFESSOR SOMERMEIER, ASSISTANT PROFESSORS DEMOREST AND

MCCAUGHEY

104. Mineralogy. Two credit hours. Second semester,

PHARMACY

(Rooms 105, 106, 107, 108, Chemistry Hall)

PROFESSORS KAUFFMAN AND DYE, MR. SPEASE, MR. SHINN

101. **Theory and Practice of Pharmacy.** Five credit hours. First semester. Lectures, recitations and laboratory. Professor KAUFFMAN Professor DYE, Mr. SPEASE, Mr. SHINN.

102. **Operative Pharmacy.** A study of galenical preparations. Five credit hours. Second semester. Lectures, recitations and laboratory. Professor KAUFFMAN, Professor DYE, Mr. SPEASE, Mr. SHINN.

103. **Pharmaceutical Chemistry.** Five credit hours. First semester. Second year. Lectures, recitations and laboratory. Professor KAUFFMAN, Professor DYE, Mr. SPEASE, Mr. SHINN.

A study of medicinal preparations involving chemical reactions.

104. **Extemporaneous Pharmacy and Prescription Practice.** Six credit hours. Second semester. Lectures, recitations, and laboratory. Professor KAUFFMAN, Professor DYE, Mr. SPEASE, Mr. SHINN.

105. **Materia Medica.** Three credit hours. First semester. Lectures and recitations. Professor DYE.

106. **Materia Medica.** Three credit hours. Second semester. Lectures and recitations. Professor DYE.

107. **Pharmaceutical Assaying.** Five credit hours. First semester. Lectures, recitations, and laboratory. Professor KAUFFMAN, Mr. SPEASE, Mr. SHINN.

A study of the assay process of the pharmacopoea.

108. **Pharmaceutical Analysis.** Five credit hours. Second semester. Lectures, recitations, and laboratory. Professor KAUFFMAN, Mr. SPEASE, Mr. SHINN.

Methods for the examination of drugs and medicinal preparations.

109. **Pharmacognosy.** Three credit hours. First semester. Lectures, recitations, and laboratory. Professor DYE.

A study of plant cells and their modification and content.

110. **Pharmacognosy.** Three credit hours. Second semester. Lectures, recitations, and laboratory. Professor DYE.

A microscopical study of crude drugs and spices and their adulterations.

111. **Pharmacognosy.** Three credit hours. First semester. Required of four-year students. Lectures, recitations, and laboratory. Professor DYE.

A microscopical study of foods, drugs and spices and their adulterants.

112. **Pharmacognosy.** A continuation of Course III. Three credit hours. Second semester. Required of four-year students. Lectures, recitations, and laboratory. Professor DYE.

Special work on textile fibers, micro-chemical tests, etc.

113. **Pharmaceutical Problems.** One credit hour. First semester. Lectures and practical exercises. Mr. SPEASE.

114. **Toxicology.** Three credit hours. Second semester. Lectures and recitations. Professor DYE.

116. **Preparation and Application of Physiological and Pathological Reagents.** Two credit hours. Second semester. Lectures, recitations and laboratory work. Mr. SPEASE, Mr. SHINN.

117-118. **Pharmaceutical Latin.** Four credit hours. The year. Mr. SPEASE.

PHYSICS

(Physics Hall)

ASSISTANT PROFESSOR BLAKE

105-106. **Physics.** Four credit hours. The year. Assistant Professor BLAKE.

GENERAL INFORMATION

PHYSICAL EDUCATION

Physical Education is conducted under the supervision of the Director, who is a graduate physician and a member of the University Faculty. He is assisted by an associate director for women, also an assistant and twenty student aids, who are selected each year from the upper classmen who show proficiency in their work. The main floor of the gymnasium (80 by 150 ft.) is thoroughly equipped with modern gymnastic apparatus. It is used by the women in the forenoon while the men exercise in the gymnasium on the first floor. In the afternoon the main floor is used exclusively by the men for class work, athletics, basketball recreative games, etc. Regular class exercise two hours per week is required during the first year of a student's residence at the University, or until he has successfully completed one year of this work. A thorough physical examination is given each student at the opening of the college year. Physical defects, abnormalities, and weaknesses are noted, and judicious, healthful exercise is prescribed to fit the student's individual needs.

CADET SERVICE

Under the law of Congress establishing the University, it is required that instruction shall be given in military science and tactics, and the Trustees have directed that all male students except those in the College of Law, and such others as may be specially excused for physical disability or for having reached the age limit of twenty-five years, shall render two years of cadet service as a condition of graduation. This work is under the direction of an officer of the regular army, detailed for the purpose.

Y. M. C. A.

The Young Men's Christian Association has come to occupy a prominent place in university life. It has a membership of about five hundred men, and is affiliated with the World's Student Christian Federation.

Religious meetings are held for men on Sunday afternoon; there are also frequent meetings for the promotion of social intercourse and good fellowship. Courses in systematic Bible study and in missions are offered. A most helpful feature of the work is that conducted in the interest of new students at the opening of the school year. Desirable rooms and boarding places are found and posted for reference at the Association Office. Representatives of the Association meet the trains, assist students in finding satisfactory locations, and endeavor in every way to make them feel at home. The Employment Bureau helps to find work.

The Young Women's Christian Association holds religious meetings regularly at noon on Tuesdays. This organization is active and efficient in working for the higher interests of the young women.

FEES

All fees must be paid at the opening of each semester as a condition of admission to classes.

Tuition.—Tuition is free in this College, but registration is not complete until certain incidental and laboratory fees are paid.

Incidental Fee.—The fee for students who are residents of Ohio is ten dollars a semester. For non-residents, the fee is fifteen dollars a semester. Children of non-resident Alumni pay the same fee as residents of Ohio.

Former students, who do not pay this fee until the third day of the first semester, and the second day of the second semester, must pay one dollar additional. For each day of delinquency thereafter fifty cents is added.

Laboratory Fees and Deposits.—A fee of two dollars a semester is charged for all laboratory courses using gas, water, electrical current or steam. For all other courses which are not purely lecture courses, a laboratory fee of one dollar is charged. All apparatus used is loaned the student without charge, but any apparatus that is lost or broken must be replaced. To meet the cost of these, as well as all other materials used in the regular laboratory work, a deposit of ten dollars for each laboratory course requiring such supplies, must be made at the Bursar's office before work is begun. Deposits made the first semester, in any continuous subject, need not be renewed the second semester unless such deposit has been overdrawn. In such event a new one must be made. Whether this may be necessary will depend

largely upon the care exercised by the student in his work. With reasonable care a student may keep the cost of materials and breakage within the deposits required. The following table gives the cost of fees and deposits, and the cost of breakage and materials used for the two years of the Short Course. For the Long Course the amount will be about double. The cost of materials used and breakage is the average calculated from the records of fifteen students for two years and may be considered a fair estimate:

	Fees	Deposits	Materials and Breakage
First year.....	\$ 10 00	\$ 20 00	\$ 17 65
Second year...	10 00	30 00	23 50

All supplies and apparatus are furnished by the Chemical Supply Store in Chemical Hall to the students at about first cost to the University, and are charged against the deposits. Any unused portion of the deposits is returned to the student at the end of the semester or year, or at such time as the student may withdraw from the University

OTHER EXPENSES

Locker Fee—The gymnasium is free to all students, but those desiring to use a locker are charged a fee of two dollars a semester, which includes the cost of towels.

Cadet Uniform—The uniform with which the members of the regiment are required to provide themselves costs (without overcoat) about twelve dollars.

It is quiet in pattern, and may be worn in place of civilian dress. New students are advised against the purchase of second-hand uniforms, and should not arrange for uniforms until so directed by the Military authorities.

The Ohio Union—A fee of one dollar a semester is paid by all male students at registration. This entitles the student to all the privileges of the Union, consistent with the Constitution and House Rules governing it.

Graduation Fee—A fee of five dollars, to cover expense of graduation and diploma, is required of each person receiving one of the ordinary degrees from the University, and this fee must be paid before the degree is conferred. A like fee of ten dollars is charged each person receiving one of the higher graduate degrees.

Rooms and Board—Furnished rooms, accommodating two students, in private homes can be rented at one dollar to one dollar and a

half per week for each student. Board at the restaurants and boarding clubs near the University costs from two dollars and seventy-five cents to three dollars and fifty cents per week. Board with furnished rooms can be obtained in private families at rates varying from five to six dollars per week.

Text-books—Students should not purchase text-books until they are advised by the instructors of their respective classes.

In order to meet all the necessary expenses of registration, books, uniform and other expenditures incident to securing a room and board, a student should come prepared to expend about fifty dollars during the first ten days of a semester. After that period his board and room rent will constitute the major part of his expenses.

EXPENSES PER YEAR.

One of the most perplexing questions that confronts a prospective student is what the course is going to cost him a year. In order to give a trustworthy answer to this question an endeavor has been made to determine the actual expenses of a number of students, and to this end they were asked to furnish a detailed statement of their expenses for the year. Averages of these statements are given below and, while they may be considered representatives, they are subject to some variations due to the personal habits of the individual.

	Medium	High
Incidentals	\$ 20 00	\$ 20 00
Laboratory fees.....	10 00	10 00
Laboratory materials and breakage.....	17 00	25 00
Other fees.....	2 00	4 00
Uniform.....	12 00	12 00
Books	10 00	15 00
Board	108 00	125 00
Room Rent.....	40 00	50 00
General expenses.....	75 00	100 00
Totals	\$ 294 00	\$ 361 00

MEMBERSHIP IN THE AMERICAN CONFERENCE

This College holds membership in the American Conference of Pharmaceutical Faculties. In several states by law and in others by the action of the Board of Pharmacy, special recognition is given to the graduates of schools holding membership in this Conference. The graduates of both the short and long courses in pharmacy of this college are entitled to all such recognition.

STANDING OF GRADUATES BEFORE THE OHIO BOARD OF PHARMACY

The Ohio Pharmacy Law requires, as a condition of registration as Pharmacist, that the candidate shall be twenty-one years of age and have had four years of practical experience. For registration as Assistant Pharmacist, the law requires that the candidate shall be at least eighteen years old and have had two years of practical experience. Recognizing the value of college training and desiring to encourage college attendance on the part of prospective candidates for registration, the Ohio Board of Pharmacy accepts the time spent in this college at its full face value as applying on the experience requirement.

QUIZ CLASSES

Quiz or review classes are regularly conducted as a part of the class work of each subject and attendance is required the same as for all classes. These are intended as a review and to explain all questions arising in the class-room or laboratory work. A general quiz class is conducted for the advanced students and those having had practical drug store experience. This meets twice a week at a time suitable for the class and, while the course is optional, it is urged that all students attend. The exercises consist of a review of the work covered in Pharmacy, Chemistry, Materia Medica, Therapeutics, Botany, Toxicology, Posology and such other subjects as are of interest to students preparing for the State Board Examinations. Regular work is assigned with the view of directing the students in a thorough and systematic review of the subjects covered in the course. Specimens of crude drugs, chemicals and pharmaceutical preparations are at hand and used for the purpose of identification and study.

PHARMACEUTICAL ASSOCIATION

This is an organization which meets once a week for the purpose of discussing subjects of special interest to Pharmacists. The membership is composed principally of students in the College of Pharmacy.

The exercises consist of a major and minor paper, reading and quiz. After the regular exercises are concluded, a business meeting is held where the students have practice in parliamentary rules, and the discussions prove very beneficial.

About once a month the regular exercises are dispensed with and some prominent pharmacist of the City or State is invited to address the Association on the practical side of the drug business. The organization is not without its social features, a special meeting being held for this purpose at the end of each semester.

THE CHEMICAL ASSOCIATION

This association, composed of the students and instructors in the departments of Chemistry and Pharmacy, has for its object the discussion of such subjects as are of importance to students of Chemistry, special stress being placed on recent discoveries. The meetings are held monthly and are of great interest.

AMOUNT OF WORK

No student is permitted to take less work than fifteen credit hours a week, except by special permission, and no student will be permitted to take more than the regular work of the class to which he belongs who has not passed all his work for the preceding semester. A credit hour means one hour of class room work in lecture, recitation, or quiz, or two to three hours of laboratory work.

RIGHTS AND PRIVILEGES

Students of the Colleges of Pharmacy are entitled to all the advantages of the Libraries, Museums, and the Gymnasium and are eligible to membership in the literary, scientific, athletic, fraternal, musical, and other societies.

THE CONVOCATION

An entire hour once a week is devoted to a convocation, at which the President presides. In addition to devotional exercises, an address is delivered upon some timely topic. During this hour the libraries and laboratories are closed and all other University exercises are suspended. The convocation is held at ten o'clock on Wednesdays, in the Chapel.

SELF-SUPPORT

There is a large amount of work upon the University farm which is assigned to students, preference being given to those who are studying Agriculture. *But the University cannot promise work to all applicants.* Many students find work in private families, in offices, and

in various occupations, by means of which they defray a portion of their expenses. A person of ability and energy, who is master of a trade, or who can do good work of any kind, can generally find employment, but prospective students are cautioned against depending wholly upon such uncertain sources of income.

Students should distinctly understand that where they attempt entire or partial self-support they should lengthen the term of study.

As an accommodation, the executive office co-operates as far as possible in this matter. The Y. M. C. A. offers its service in helping young men to secure employment. Very much depends, however, on the individual's power of initiative. Students should not come to the University expecting others to find places for them. They should report to the executive office from time to time as to their needs and their work. This will enable the authorities to be more helpful than otherwise would be possible.

GRADUATES

The University is anxious to keep on record the correct addresses of all graduates. It will be considered a favor if any graduate who changes his address will notify the University Editor of his new address.

- Ackerman, Graham Burt, B. Sc., '04.....*Columbus, O.*
With P. J. Ackerman, Goodale and High Sts.
- Agler, Eulalia, G. Ph., '95 (Mrs. W. Harry Whitford) *Columbus, O.*
- Albert, Louise Mary, G. Ph., '96; A. B. (Ohio Wesleyan) '95
(Mrs. A. E. Vinson).....*Tucson, Ariz.*
- Allaman, William E., G. Ph., '96; M. D., (O. M. U.), '02..*Dayton, O.*
Physician
- Apt, Otto Holmes, Ph. C., '08.....*Waldo, O.*
Pharmacist
- Armstrong, William H., G. Ph., '90.....*Wichita, Kan.*
Sec.-Treas., Wichita Hydl. Stone Co.
- Arnold, Irvin Elmer, Ph. C., '08.....*Columbus, O.*
Pharmacist, with C. H. Young & Co.
- Austin, Edgar C., Ph. C., '10.....*Cincinnati, O.*
Pharmacist, the C. M. Dow Co.
- Bagley, Anna Gertrude, G. Ph., '94.....*Columbus, O.*
Assistant Editor, *Midland Druggist.*
- Baltzly, Stanley M., Ph. C., '02.....*Massillon, O.*
With the Baltzly Drug Co.
- Barnes, E. Berlin, Ph. C., '08.....*Columbus, O.*
Pharmacist, the Varsity Drug Store.
- Barrick, Alfred Ashberry, Ph. C., '98.....*Newark, O.*
Chemist for Styron, Beggs & Co.
- Bates, Lloyd V., Ph. C. '10.....*Columbus, O.*
Pharmacist, with The A. W. Block Drug Co.
- Baughman, George Washington. G. Ph., '97.....*Gilboa, O.*
Pharmacist.
- Beatty, Hugh Gibson, Ph. C., '04, M. D., (S. O. M. C.)
'10.....*Columbus, O.*
Interne, Mt. Carmel Hospital.
- Bechtel, Carl G., Ph. C., '09.....*Orrville, O.*
Pharmacist.
- Beeler, Clyde S., Ph. C., '03.....*Hamilton, O.*
Pharmacist.

- Berger, Joseph Carl, Ph. C., '08.....*Columbus, O.*
Pharmacist.
- Blaire, Edward Guy, G. Ph., '95.....*Shawnee, O.*
Pharmacist.
- Block, Arthur W., Ph. C., '02.....*Columbus, O.*
With the A. W. Block Drug Co.
- Blum, Robert G., B. Sc. Pharm., '11.....*Portsmouth, O.*
Pharmacist
- Bodman, Edgar S., Ph. C., '03.....*Bement, Ill.*
Pharmacist.
- Boesche, Felix John, G. Ph., '96.....*Unionville, Mo.*
Pharmacist.
- Bolenbaugh, Albert, B. Sc. (Phar.), '07.....*Richmond, Va.*
Professor of Pharmacy, University College of Medicine.
- Bolles, Herman Uhrig, Ph. C., '05.....*Cincinnati, O.*
Pharmacist with Weatherhead Pharmacy Co.
- Bowen, Charles Flood, Ph. C., '00; M. D. (Starling) '03, *Columbus, O.*
Radiographer for Grant Hospital.
- Bradford, Ernest, G. Ph., '92.....*Cristobal, Canal Zone.*
Chemist Subsistence Dept.
- Bradshaw, Harry James, Ph. C., '99.....*Detroit Mich.*
With The Bowser Mfg. Co.
- Braun, Joseph George, G. Ph., '97.....*Vina, Cal.*
Contractor.
- Brewer, Harry, Ph. C., '10.....*Columbus, O.*
Asst. Dispenser Chemical Supply Store, O. S. U.
- Brewer, John Whitney, G. Ph., '96.....*Columbus, O.*
Pharmacist, The Liggett Pharmacy.
- Brower, Harrold Ozias, Ph. C., '04.....
- Brown, Clarence M., B. Sc. Pharm., '11.....*Logan, O.*
Pharmacist, L. O. Bort & Co.
- Buck, Frank Hughes, Ph. C., '09.....*Toledo, O.*
With M. F. Newcomer & Son.
- Bunnel, Larone Allen, G. Ph., '98.....*Dayton, O.*
Pharmacist.
- Burch, John Arthur, Ph. C., '08.....*Columbus, O.*
Pharmacist, Standard Drug Co.
- Busch, Cadie V., Ph. C., '10.....*Racine, O.*
Pharmacist.
- Calkins, William Bartlett, G. Ph., '98.....*Boston, Mass.*
Chemist with Fuel Testing Co.
- Canfield, Delos Wilford, Ph. C., '00.....*Columbus, O.*

- Cassady, Clyde Brint, Ph. C., '01.....*Alliance, O.*
With the Cassady Drug Co.
- Cassady, Henry E., Ph. C., '11.....*Richwood, O.*
Pharmacist.
- Chaney, Lee F., Ph. C., '04.....*Springfield, O.*
L. F. Chaney Barometer Co.
- Covert, Benjamin H., Ph. C., '09.....*Loudonville, O.*
Pharmacist.
- Cromley, Alva Miller, G. Ph., '97.....*Columbus, O.*
The Columbian Drug Co.
- Crowe, Robert Latta, Ph. C., '11.....*Memphis, Tenn.*
Medical Student and Assistant in Pharmacy Laboratory, University
of Tennessee Medical College.
- Culbertson, Claude Lanier, Ph. C., '98.....*Zanesville, O.*
With Culbertson & Gorsuch.
- Cummins, Henry Rollin, G. Ph., '91.....*Columbus, O.*
Pharmacist.
- Davies, Brinly C., Ph., C., '06.....*Youngstown, O.*
Pharmacist with Davies' Pharmacy.
- Davis, Arthur Richard, Ph. C., '08.....*Jeffersonville, O.*
Pharmacist
- Davis, William Ellwood, B. Sc. (Phar.), '08.....*Washington, D. C.*
Pharmacist, Friedman's Hospital.
- Davy, Edward D., B. Sc. (Pharm.), '11.....*Cristobal, Canal Zone.*
Asst. Chemist Subsistence Department.
- Day, Clayton Miller, Ph. C., '99.....*Blanchester, O.*
Pharmacist.
- Dickerson, Archibald H., Ph. C., '03.....*Cincinnati, O.*
With Walnut Hills Pharmacy.
- Dye, Clair Albert, G. Ph., '91, Ph. D. (Berne, Switzerland),
'01.....*Columbus, O.*
Professor of Pharmacy, Ohio State University.
- Dysart, Nelson C., Ph. C., '04; M. D. (Starling Ohio),
'08.....*Columbus, O.*
Physician.
- Easterday, Charles Todd, G. Ph., '91.....*Wellston, O.*
With Parke, Davis & Co.
- Engleken, Edward, Ph. C., '05.....*Greenville, O.*
Pharmacist.
- Etinger, Harry, Ph. C., '10.....*Youngstown, O.*
Pharmacist.
- Evans, Christmas, Ph. C., '08.....*Columbus, O.*
Pharmacist With The Wendt-Bristol Co.

- Feller, Charles Walter, Ph. C., '08.....Troy, O.
Pharmacist.
- Fickardt, George H., B. Sc. (Pharm.), '11....Circleville, O.
- Fisher, Robert M., G. Ph., '95; M. Ph., '96; B. Sc., '98, St. Louis, Mo.
Instructor in Chemistry in High School.
- Foster, George W., Ph. C., '11.....Canton, O.
Pharmacist.
- Foster, LeRoy B., Ph. C., '09.....Washington, D. C.
With U. S. Dept. of Commerce and Labor.
- Funk, John R., Ph. C., '08Hamilton, O.
Pharmacist with R. K. Beller & Co.
- Funk, Lee William, B. Sc. (Phar.), '08.....Columbus, O.
Pharmacist, L. W. Funk Drug Co.
- Funk, Roy W., Ph. C., '99; B. Sc., '02.....New Lexington, O.
Pharmacist, R. W. Funk Drug Co.
- Furney, Claude L., Ph. C., '08.....Kenton, O.
Pharmacist, Furney & Son.
- Gaessler, William G., B. Sc. (Pharm.), '11.....Ames, Iowa
Chemist, Experiment Station
- Gardner, Charles Alfred, Ph. C., '00.....Memphis, Tenn.
Pharmacist.
- Given, Kenneth J. C., Ph. C., '08.....Chandlersville, O.
Pharmacist.
- Goodman, Sylvester Jacob, G. Ph., '96; M. D. (Jefferson
Medical College), '00.....Columbus, O.
Physician, East State St.; Asst. Surgeon, Grant Hospital.
- Grandle, Frank Albert, G. Ph., '91.....Newark, O.
Pharmacist.
- Graner, Carl, G. Ph., '98.....Ft. Stevens, Ore.
Hospital Steward, U. S. A.
- Green, Robert Lee, G. Ph., '92.....Notre Dame, Ind.
Professor of Pharmacy, Notre Dame College
- Groff, Mrs. Orsylla A., G. Ph., '94.....Columbus, O.
Pharmacist, 2091 N. High St.
- Hancock, David Roberts, G. Ph., '89; M. D. (Starling) '92
Redondo Beach, Cal.
Physician.
- Haney, Thomas Carlyle, G. Ph., '94.....Columbus, O.
Pharmacist.
- Harvey, Lucy Manola, Ph., C., '00.....Pomeroy, O.
Pharmacist.
- Harvey, Sherman Lee, G. Ph., '96.....Columbus, O.
Pharmacist.

- Hedrick, Earl, Ph. C., '10 *Columbus, O.*
Student O. S. U.
- Henderson, Herbert, B. Sc. (Phar.) '04 *Columbus, O.*
Supt. of Prof. Edward Orton's Testing Laboratory.
- Hicks, George R., Ph. C., '10 *Kansas City, Mo.*
Pharmacist, with E. S. Lee.
- Higgins, Ernest J., Ph. C., '02 *Norwalk, O.*
Pharmacist, with C. F. Jackson Co.
- Hiland, Wayman L., Ph. C., '06 *Matoaka, W. Va.*
Pharmacist, Matoaka Drug Co.
- Hjelm, Charles Emmett, Ph. C., '07 *Cincinnati, O.*
Medical Student at Miami Medical Col.
- Holdren, James W., Ph. C. '11 *Marietta, O.*
Pharmacist with J. W. Dysle Co.
- Holloway, David Francis, Ph. C., '99 *Middletown, O.*
Pharmacist.
- Hoover, Walter Emmett, Ph. C., '01 *Columbus, O.*
Pharmacist.
- Huddleson, Don Carlos, G. Ph., '97 *Columbus, O.*
With Westinghouse, E. & M. Co.
- Huff, George H., Ph. C., '99 *Columbus, O.*
Traveling Representative, Kauffman-Lattimer Co.
- Huffsey, Irving Mail, Ph. C., '08 *Toledo, O.*
Proprietor Secor Hotel Pharmacy.
- Hughes, William A., Ph. C., '10 *Columbus, O.*
Pharmacist, Worthington Drug Co.
- Hutsinpillar, Charles L., Ph. C. '11 *Wellston, O.*
Pharmacist, Palace Drug Co.
- Johnson, Columbus C., Ph. C., '04 *Cleveland, O.*
Pharmacist.
- Johnson, William Noel, Ph. C., '99 *Springfield, O.*
Pharmacist.
- Jones, Daniel David, G. Ph., '93 *Xenia, O.*
Pharmacist.
- Jones, Fred Emerson, Ph. C., '08 *Columbus, O.*
Dispenser, Chemical Supply Store, O. S. U.
- Jones, Stanley M., Ph. C., '11 *Columbus, O.*
Pharmacist with The Kiler-Walters Co.
- Kathe, J. Bernard, Ph. C., '99 *Elyria, O.*
Pharmacist.
- Kauffman, Myron B., B. Sc. (Phar.) '09 *Columbus, O.*
Chemist, Kauffman-Lattimer Co.
- Keel, Claud Denzil, B. Sc. (Phar.), '07 *Bucyrus, O.*
Pharmacist.

- Keiser, Romeo Orpheus, B. Sc., '92 G. Ph., '96; M. D.
(O. M. U.) '98; M. D. (Cleveland Homeopathic
Medical College) '99..... *Columbus, O.*
Physician.
- Kerr, Frank Pierce, Jr. Ph. C., '99..... *Lake View, O.*
Pharmacist.
- Kiler, Abdel William, G. Ph., '96..... *Columbus, O.*
Pharmacist—Member Ohio Board of Pharmacy
- Kimberly, Charles Hubbell, B. Sc; '00; M. Sc. '01; Ph. D.
(Providence) '05..... *Philadelphia, Pa.*
Professor of Materia Medica and Applied Chemistry, De-
partment of Pharmacy, Medico Chirurgical College.
- Kingslow, James C., Ph. C. '11..... *Bluefield, W. Va.*
Pharmacist.
- Krieger, Charles Henry, G. Ph., '87..... *Columbus, O.*
Traveling Representative for Merck & Co.
- Lake, William W., Ph. C. '11..... *Richwood, O.*
Student, Ohio State University.
- Lallance, Leroy Armstrong, Jr., Ph. C., '99..... *Wheeling, W. Va.*
Merchant.
- Landacre, Walter Alexander, G. Ph., '91; B. Sc.
(Pharm.) '02..... *Columbus, O.*
Chemist for H. Braun Sons Co.
- Landefeld, Bert F., Ph. C. '11..... *Chicago, O.*
Pharmacist.
- Landrum, Francis H., B. Sc. (Phar.), '10, M. A., '11... *Columbus, O.*
Student, Starling-Ohio Med. College.
- Lawler, Fred J., Ph. C., '05..... *Mt. Vernon, O.*
Pharmacist.
- Lawrence, Arthur Kelton, G. Ph., '97 M. D. (O. M. U.)
'07..... *Wichita, Kan.*
Physician.
- Leake, Harrison S., Ph. C. '11..... *E. Palestine, O.*
Pharmacist.
- Lease, John H., Ph. C., '09..... *Springfield, O.*
Pharmacist, Churchman's Pharmacy.
- Lee, Edwin Sherman, G. Ph., '93..... *Kansas City, Mo.*
Pharmacist.
- Lefferson, Charles Henry, Ph. C., '01..... *Lima, O.*
Pharmacist.
- Lehner, Charles S., Ph. C., '11..... *Columbus, O.*
Store Room, O. S. U.
- Leonard, John A. Ph. C. '11..... *Columbus, O.*
Pharmacist.

- Loefer, John H., Ph. C., '10.....*Ilion, N. Y.*
Pharmacist.
- Logsdon, Clement Jay, G. Ph., '98.....*Osborn, O.*
Pharmacist.
- Lucas, Charles Herbert, Ph. C., '09.....*Circleville, O.*
Pharmacist, G. H. Fickardt & Son.
- McAllister, Wallis Kelly, Ph. C., '08.....*Belmont, O.*
Pharmacist.
- McBride, Charles Robert, Ph. C., '02.....*Elida, O.*
Pharmacist.
- McClintock, Chester, Ph. C., '07.....*Columbus, O.*
Pharmacist, The Groff Pharmacy.
- McClure, Clarence M., Ph. C., '04; P. D. (P. C. P.) '07, *Detroit, Mich.*
With Frederick Sterns & Co., Department of Publicity.
- McCormick, Thomas G., Ph. C., '09.....*Columbus, O.*
Student, Starling-Ohio Med. College.
- McElroy, William Harrison, Ph. C., '09.....*Newcomerstown, O.*
Pharmacist, Jos. Mulvane & Co.
- McMaster, Harry W., Ph. C., '07, D. V. M., '08.....*Chicago, Ill.*
U. S. Inspector, B. A. I.
- McNair, Walter, Ph. C., '06.....*Delmonte, Cal.*
Pharmacist for the Hotel Delmonte.
- MacGuire, Charles White, G. Ph., '95; M. D. (Toledo Medical
College) '97.....*Clyde, O.*
Physician and Pharmacist.
- Magly, Robert A., G. Ph. '97.....*Columbus, O.*
Sales Manager Ideal Heating Co.
- Main, Ray F., B. Sc. (Phar.) '09.....*Chicago, Ill.*
Chemist with Illinois Steel Co.
- Mason, George Franklin, G. Ph., '90; M. D. (Milwaukee Medical
College) '00.....*Milwaukee, Wis.*
Physician.
- Mathews, Herbert D., Ph. C., '10.....*Mt. Gilead, O.*
Student, Ohio State University.
- Matson, George Hiram, G. Ph., '92, M. D. (O. M. U.)
'05.....*Columbus, O.*
Physician, Long and Mulberry Sts., and Secretary Ohio Medi-
cal, Board of Registration.
- Mebs, George Henry, G. Ph., '97.....*Columbus, O.*
Chemist with Hatton Bros.
- Metzger, Edward Henry, G. Ph., '97.....*Columbus, O.*
Pharmacist with the Wendt-Bristol Co.
- Middleton, Ambrose, G. Ph., '95.....*Springfield, Ore.*
Pharmacist.

- Miller, Daniel Elmer, G. Ph., '90; M. D. (Miami Medical Col. Miami)
'99.....*Dayton, O.*
Physician.
- Mohler, Bruce M., B. Sc. (Phar.), '09.....*Minneapolis, Minn.*
Chemist and Bacteriologist in the Laboratories of the Minnesota
State Board of Health, University of Minnesota.
- Moore, Rodney Downing, Ph. C., '98.....*Youngstown, O.*
Pharmacist, E. Federal St.
- Morlock Edward G., Ph. C., '10.....*Dayton, O.*
Pharmacist Soldiers' Home Hospital.
- Morris, Harry L., Ph. C., '98.....*Columbus, O.*
Pharmacist, Guthke's Pharmacy.
- Moss, William, G. Ph., '98.....*Waterloo, Ia.*
Asst. Supt., Electrical Dept., Citizens Gas and Elec. Co.
- Musser, Fred A., Ph. C., '11.....*Youngstown, O.*
Pharmacist, Mock's Pharmacy.
- Norwood, Fred Adolph, Ph. C., '07.....*Berkeley, Cal.*
Pharmacist.
- Obetz, Francis H., G. Ph., '96; M. D. (Starling O. M. C.) *Columbus, O.*
Police Physician.
- Odebrecht, August, G. Ph., '95.....*Granville, O.*
Instructor, Denison University.
- Oglesby, Nicholas Perkins, Ph. C., '00; M. D., (Starling O. M. C.)
'04.....*Columbus, O.*
Physician, Parsons Ave. and Oak St., and Lecturer on
Therapeutics, Starling-Ohio Medical College.
- Patton, Clark, Ph. C., '05.....*Grand Rapids, O.*
Pharmacist.
- Pearce, George Downer, G. Ph., '92.....*South Charleston, O.*
- Pearse, Bernard R., Ph. C., '07.....*Cleveland, O.*
With the Erie Railroad.
- Peters, Otto, Ph. C., '08.....*Fort Wayne, Ind.*
Detail representative for Eli Lilly & Co.
- Peirsol, Allen G., Ph. C., '10.....*Bellaire, O.*
Pharmacist with C. M. Wyrick.
- Pike, George Walter, Ph. C., '09.....*Akron, O.*
Pharmacist.
- Potter, Louis M. H., Ph. C., '99.....*Columbus, O.*
With Schroth & Potter.
- Price, Herbert S., Ph. C., '11.....*Columbus, O.*
With The Orr, Brown, Price & Co.
- Putt, Earl Berger, B. Sc. (Phar.), '09.....*Fargo, N. D.*
Professor Materia Medica and Assistant to State Chemist, Agricultural
College, N. D.

- Ranck, Paul, Ph. C., '10.....*Columbus, O.*
Pharmacist, A. W. Block Drug Co.
- Reese, William Henry, G. Ph., '96.....*Wellston, O.*
Merchant.
- Reynolds, Glide A., Ph. C., '09.....*Akron, O.*
Pharmacist with Dutt Pharmacy.
- Roscoe, Percy Evan, Ph. C., '06.....*Kirksville, Mo.*
Student, American School of Osteopathy.
- Rostofer, Freeman Allen, Ph. C., '99.....*Columbus, O.*
With The Columbus Pharmacal Co.
- Russell, Robert D., Ph. C., '10.....*Cincinnati, O.*
Pharmacist with A. W. Dickerson.
- Ryan, Percy M. J., Ph. C., '10.....*Binghamton, N. Y.*
Pharmacist.
- Sattler, Carl F., Ph. C., '07.....*Bellville, O.*
Pharmacist.
- Sauerbrun, Otto O., Ph. C., '04.....*Columbus, O.*
Pharmacist, with H. L. Beck & Co., 366 S. Fourth St.
- Schilling, Robert Wilson, Ph. C., '98; M. D. (O. M. U.) '01
New Somerset, O.
Physician.
- Shinn, Leon Powell, Ph. C. '09.....*Columbus, O.*
Student, Ohio State University, and Student Assistant in
Department of Pharmacy.
- Shippo, Paul Spencer, Ph. C., '09.....*Zanesville, O.*
Pharmacist.
- Slater, Burr Homer, Ph. C., '95.....*Chesterville, O.*
Merchant.
- Smith, Burton Griffin, G. Ph., '95.....*Manila, P. I.*
Hospital Steward, U. S. A.
- Smith, Clarence Elmer, G. Ph., '98; M. D. (O. M. U.), '02
Massillon, O.
Physician.
- Smith, Ernest Edwin, G. Ph., '97.....*Goldfield, Nev.*
Pharmacist.
- Smith, Mabel Elsie, Ph. C., '04.....*Unionville Center, O.*
- Somermeier, Edward Everett, G. Ph., '98.....*Columbus, O.*
Professor of Metallurgy and Mineralogy, O. S. U.
- Southard, Eustace Elden, G. Ph., '96.....*El Paso, Tex.*
- Spease, Edward, B. Sc. (Phar.) '07.....*Columbus, O.*
Instructor in Pharmacy, O. S. U.
- Spencer, William Henry, G. Ph., '91.....*Sandusky, O.*
Asst. Treas. Ohio Motor Co.

- Stanbery, Charles Longstreet, G. Ph., '92.....*McConnellsville, O.*
Pharmacist.
- Stump, William Lisle, G. Ph., '97; M. Ph., '98.....*Marion, O.*
Pharmacist.
- Sutphen, James Leonard, G. Ph., '97.....*Outville, O.*
Farmer.
- Sweet, Fred Watson, Ph. C., '98.....*Akron, O.*
With the John Hancock Insurance Co.
- Swigart, George M., Ph. C., '09.....*Dayton, O.*
Manufacturing Pharmacist.
- Swisher, William Henry, G. Ph., '96; M. D. (O. M. U.) '98,
Dayton, O.
Physician.
- Teter, Anstie Welsh, G. Ph., '96.....*Bainbridge, O.*
Pharmacist.
- Tupper, Eugene Larry, G. Ph., '93; M. D. (Univ. of Minn.) '97
Physician. *Ottawa, O.*
- Van Cleve, Pearl Clark, Ph. C., '05.....*Big Plain, O.*
Pharmacist.
- Voegtly, Leander M., Ph. C. '11.....*Youngstown, O.*
Pharmacist, Kenney's Pharmacy.
- Voke, Lewis Farewell, G. Ph., '93, M. D. (Starling)' '96, *Columbus, O.*
Physician.
- Wagstaff, Edward A., G. Ph., '93.....*Niles, O.*
Pharmacist.
- Wagstaff, Harry Garfield, Ph. C., '00... .. *Santa Fe, Isle of Pines*
Merchant.
- Walker, Carl S., Ph. C., '08.....*Sutton, W. Va.*
Pharmacist.
- Walter, Earl B., Ph. C., '06.....*Centerburg, O.*
Pharmacist.
- Watson, Don C., Ph. C. '11.....*New London, O.*
Pharmacist.
- Webb, Edward Nathan, B. Sc., (Phar.) '02; M. A., '04.. *Columbus, O.*
Chemist, Columbus Pharmacal Co.
- Weidner, George F., G. Ph., '87.....*Columbus, O.*
Chemist for the Kauffman-Lattimer Co.
- Welsh, Allen G., B. Sc. (Pharm.), '11.....*Youngstown, O.*
Pharmacist, Kenney's Pharmacy.
- Wendt, William Carl, G. Ph., '89.....*Columbus, O.*
Pharmacist, Wendt-Bristol Co.
- Whitacre, William Carl, Ph. C., '04.....*Springfield, O.*
Pharmacist.

- Wilburn, Ballard R., Ph. C. '11.....*Cincinnati, O.*
Chemist, The W. S. Merrell Drug Co.
- Williams, Daniel H., Ph. C., '11.....*Sacramento, Cal.*
Pharmacist.
- Wilson, James B., Ph. C., '08*Columbus, O.*
Pharmacist Town and Third Sts.
- Winter, Carl, Ph. C., '04.....*Cleveland, O.*
Pharmacist.
- Yengling, Ralph W., Ph. C., '11.....*Columbus, O.*
Pharmacist.
- Young, Cyrus Homer, B. Sc., (Phar.) '01.....*Columbus, O.*
Asst. Chemist, State Board of Agriculture.
- Young, Harry Nelson, G. Ph., '95.....*Flint, Mich.*
Pharmacist.
- Ziegler, Paul Clayton, Ph. C., '08.....*Mechanicsburg, O.*
Pharmacist.